

IN THE CLAIMS

Please amend the claims as follows:

1-20. (CANCELED)

21. (CURRENTLY AMENDED) A process for converting bulk nickel metal to nickel sulfate comprising the steps of:

1) providing at least one enclosed reactor column containing
a bulk nickel metal, said bulk nickel metal having an average size
of at least .1 mm;

2) introducing supplying sulfuric acid at a first pressure into each of said at least one enclosed reactor column, said sulfuric acid having a concentration sufficient to dissolve the said bulk nickel metal;

3) introducing supplying an oxygen containing gas at a second pressure above the said first pressure after the sulfuric acid begins reacting with said bulk nickel metal to produce thereby producing a nickel sulfate solution; and

4) collecting the said nickel sulfate solution in a collection receptacle; and

~~separating the nickel sulfate from the nickel sulfate solution.~~

22. (CURRENTLY AMENDED) The process according to ~~of~~ claim 21, wherein said step of introducing supplying sulfuric acid

~~comprising~~ comprises ~~a pump~~ pumping sulfuric acid to each of said at least one reactor column from a sulfuric acid container.

23. (CURRENTLY AMENDED) The process ~~of according to~~ claim 22, ~~wherein said step of introducing~~ supplying sulfuric acid ~~comprising a pump~~ comprises pumping sulfuric acid to a first reactor column from a sulfuric acid container, said first reactor column connected in series to at least one further reactor column comprising at least a last reactor column, said last reactor column ~~adapted to flow providing the said~~ nickel sulfate solution to ~~the said~~ sulfuric acid container for said step of collecting said nickel sulfate solution.

24. (CURRENTLY AMENDED) The process ~~of according to~~ claim 23 ~~21, further comprising wherein said step of supplying sulfuric acid~~ comprises adding sulfuric acid continuously to each of said at least one enclosed reactor column to maintain stoichiometry within each of said at least one enclosed reactor column until all of said nickel metal is dissolved.

25. (CURRENTLY AMENDED) The process ~~of according to~~ claim 21, wherein said first pressure is in ~~the~~ a range of about 10 psi to about 149 psi.

26. (CURRENTLY AMENDED) The process of according to claim 21, wherein ~~the pressure of~~ said first pressure is in a range of about 11 to about 150 psi.

27. (CURRENTLY AMENDED) The process of according to claim 21, wherein the said second pressure is at least 2 psi greater than said first pressure.

28. (CURRENTLY AMENDED) The process of according to claim 21 43, wherein said step of separating the nickel sulfate from said nickel sulfate solution ~~comprising~~ comprises heating the said nickel sulfate solution until the nickel sulfate precipitates out of said nickel sulfate solution.

29. (CURRENTLY AMENDED) The process of according to claim 21, wherein said at least one reactor column ~~comprising~~ comprises four reactor columns, wherein said four reactor columns ~~are being~~ connected in series between a pump and a sulfuric acid container.

30. (CURRENTLY AMENDED) The process of according to claim 29, wherein said step of ~~introducing~~ supplying oxygen containing gas comprises ~~introducing~~ supplying oxygen containing gas between the said pump and the first of said four reactor columns.

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31. (CURRENTLY AMENDED) The process of according to claim 21, wherein said at least one reactor column ~~comprising~~ comprises one reactor column, ~~wherein~~ said one reactor column ~~is being~~ connected between a pump and a sulfuric acid container.

32. (CURRENTLY AMENDED) The process of according to claim 31, wherein said step of introducing supplying said oxygen containing gas ~~comprising~~ comprises introducing supplying said oxygen containing gas between the said pump and the said one reactor column.

33. (CURRENTLY AMENDED) The process of according to claim 21, wherein said sulfuric acid ~~having~~ has a concentration of about 7% to about 30%.

34. (CURRENTLY AMENDED) The process of according to claim 21, wherein said step of collecting said nickel sulfate solution ~~comprising~~ comprises depositing the said nickel sulfate solution into ~~said~~ a sulfuric acid container.

35. (CURRENTLY AMENDED) The process of ~~claim~~ according to claim 21, wherein said at least one enclosed reactor column is heated ~~further comprising heating said nickel sulfate solution~~

during said step of introducing supplying said sulfuric acid and said step of introducing supplying said oxygen containing gas.

36. (CURRENTLY AMENDED) The process ~~of Claim~~ according to claim 35, wherein said at least one enclosed reactor column is heated ~~heating comprising heating said nickel sulfate solution to~~ a temperature between in the range of 90 °C to 95 °C.

37. (CURRENTLY AMENDED) The process ~~of Claim~~ according to claim 29, wherein said step of introducing supplying oxygen containing gas ~~comprising~~ comprises introducing supplying oxygen containing gas between the last of said four reactor columns and the sulfuric acid container.

38. (CURRENTLY AMENDED) The process ~~of Claim~~ according to 31, wherein said step of introducing supplying oxygen containing gas ~~comprising~~ comprises introducing supplying oxygen containing gas between said one reactor and the sulfuric acid container.

39. (CANCELED) The process ~~of Claim~~ according to 1, wherein said oxygen containing gas ~~comprising~~ comprises oxygen gas, air, or a mixture thereof.

40. (CURRENTLY AMENDED). The process ~~of Claim according to~~ 21, wherein said oxygen containing gas ~~comprising~~ comprises oxygen gas, air or a mixture thereof.

41. (NEW) The process according to claim 21, wherein said bulk nickel metal comprises a plurality of bulk nickel particles having an average size of at least 0.1 mm.

42. (NEW) The process according to claim 21, wherein said nickel sulfate solution contains a concentration of nickel metal of about 10 weight percent.

43. (NEW) The process according to claim 21, further comprising the step of:

5) separating the nickel sulfate from said nickel sulfate solution.

44. (NEW) A process for making nickel hydroxide comprising the steps of claim 21 and further including the step of:

5) converting said nickel sulfate solution to nickel hydroxide.